









Access Management Program at State Level (cont.)

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Access Management in Montana: From Statewide Planning to Implementation

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A. Introduction

This paper provides an overview of the outcomes from Montana Department of Transportation's (MDT) Access Management Project that was completed in February 1998. Through the Access Management Project, MDT has developed an enhanced approach to access management, designed the elements of an ongoing access management program, and prepared an implementation plan for initiating and maintaining the new approach.

1. Project Background

The Access Management Project took as its starting point the access management policy goals and actions established through the statewide transportation plan, TranPlan 21, that was completed in 1995. This plan established policy and specified actions that MDT should take to determine how improved access management can preserve the functional integrity of Montana's transportation system.

The policy direction for addressing access management was developed through a process that included an extensive stakeholder and public involvement process, technical work to evaluate issues, and the careful consideration of potential actions by the Montana Transportation Commission.

In brief, the statewide planning process reached the following conclusions:

- Citizens (primarily in western Montana) are concerned that current development patterns and access management practices reduce the effectiveness of the transportation system.
- Citizens (primarily in western Montana) consider access management a tool that should be used to support corridor preservation.
- There is a lack of consistent, rigorous application of access management policies.
- There is a lack of consistency in the application of access management standards.

The statewide plan, TranPlan 21, concluded that MDT needed to enhance access management to help preserve the safety and efficiency of the highway system. The planning analysis found that the need to improve access management is most pronounced in the areas of the state that are growing more rapidly.

2. Project Objectives

The Montana Transportation Commission and MDT division administrators agreed with the findings of the statewide planning process and concluded that MDT should take action to strengthen access management in Montana. Their decision regarding access management was that MDT needed to improve on the existing plan in a very careful and deliberate approach. The Access Management Project implements this policy direction.

The overall objective of the Access Management Project was to implement the policy goals and actions specified in the statewide plan, TranPlan 21, adopted by the Montana Transportation Commission.

To that end, the Access Management Project had the following objectives:

- Implement TranPlan 21 actions adopted by the Montana Transportation Commission.
- Address citizen and stakeholder concerns about safety and system preservation.
- Focus on problem areas to increase the safety and preserve the functional integrity of the highway system.
- Develop an access classification system applicable to Montana and recommend acceptable access, spacing, and design criteria.
- Account for the diversity of Montana conditions.
- Identify access management methods for implementing the classification scheme.
- Develop an implementation plan that specifies the steps, authority, organizational responsibilities, and process for strengthening access management in Montana.
- Produce an illustrated guide and technical analysis to communicate the benefits of enhanced access management.

3. Project Approach

The project evaluated MDT's existing access control policies as they pertain to approach control, site development, and the state/local review process in addressing access along state highway facilities. This evaluation was to assist in the development of a systematic overall approach to access management. The primary focus of attention is on the impacts arising from increases in urban and suburban land use densities abutting state highways in the growing parts of the state. The statewide plan had concluded that as traffic volumes and trip generation increase, the influence of the frequency, location, and design of driveways and intersections is becoming a critical factor in the performance and safety of portions of Montana's system. The project was

to develop a systematic approach to access management tailored to Montana's particular needs: its broad range of road types, development patterns, geography, and political jurisdictions.

The project involved the following work steps:

- Assessment of MDT's readiness for change.
- Evaluation of the effectiveness of the current approach.
- Review of the legal and administrative basis for access management in Montana.
- Assessment of the applicability of lessons learned in other states to Montana.
- Development of an access classification system.
- Development of recommendations for access spacing and design criteria for the access classifications.
- Preparation of implementation recommendations and an implementation plan.
- Involvement of MDT and FHWA employees through a project steering committee.
- Involvement of affected jurisdictions and stakeholders through a project advisory committee.

B. Organizational Readiness

At the outset of the Access Management Project, an assessment was performed to determine how ready MDT management, stakeholders, and partners were to address the difficult issues associated with improving access management.

The following describes the general perceptions of MDT employees who were interviewed regarding access management:

- It is important that MDT exercise its responsibilities to the motoring public by providing leadership to protect the functional integrity of the highway system in the growing parts of the state.
- MDT needs to be proactive in addressing access management. Interviewees are concerned that MDT is too reactive. They believe that in order to have a proactive approach MDT needs a clearly stated definition of the purpose and need for access management.
- There is general agreement that MDT does well in addressing access management issues in the design of projects.

- Access management problems arise mainly with requests for access to existing facilities. There is a belief that MDT is too weak in exercising its existing authority to manage access.
- MDT employees are concerned that the public and local government agencies should recognize that access management is not a substitute for land use planning and/or growth management.
- Education within MDT and among other transportation professionals in Montana about the purpose and benefits of access management will be critical for the success of strengthening MDT's access management planning.
- MDT employees believe that there are significant safety problems on the primary system in growing areas that should be addressed through access management.
- There is widespread concern that new access requests in growing areas are degrading the operating efficiency of the roadway. Further, MDT needs to get as much capacity out of existing facilities as possible. In the absence of effective access management, two-lane facilities will quickly need to be replaced with four-lane ones.

1. Access Control Resolutions

Under Montana Statute, the Transportation Commission has the authority to regulate highway access through establishing access control resolutions that limit access rights. The following describes the perceptions of MDT employees who were interviewed about the use of access control resolutions:

- No concern was expressed regarding the use of access control resolutions as an access management tool for reconstruction projects.
- In the past, it was assumed that all reconstruction projects would involve access control resolutions.
- Where used, the resolutions are considered to provide an effective tool. Currently, over 400 miles on the state system have resolutions applied to them.
- On occasion, the purchaser of property abutting the highway in an access controlled area may not read or take note of the fact that the property does not have right of access to the highway.

2. Driveway Approach Standards and Permits

The following describes the opinions of MDT employees who were interviewed about the use and issuance of driveway approach permits:

- There was a concern that MDT is not consistent within and between regions in the application of the existing driveway approach standards.

- Most interviewees believed that it is often difficult to deny applications for driveway permits. Interviews in the Missoula District found that the District is currently issuing between 250 and 300 permits a year. It is estimated that one-third of the original permit requests are modified during the permitting process. The District has denied permits in the past and will continue to do so where driveways do not meet MDT's approach standards.
- MDT's current approach to access management through the approach standards focuses on the right-of-way requirements for managing safe access to the highway. There is little focus on the impact that access has on traffic flow on the highway.
- There was some concern that the approach standards do not provide for minimum spacing requirements between driveways or signalized intersections.
- The approach permit standards do not enable MDT to deny an approach permit to a "land locked" parcel. Interviewees believe this impedes access management.

3. Management and Organization

The following describes the perceptions of MDT employees who were interviewed about the management and organization of MDT's access management responsibilities:

- There was strong awareness of the safety and corridor preservation benefits from enhanced access management planning by MDT managers. MDT employees have a high level of readiness to implement more proactive access management.
- Responsibility for access management in MDT is fragmented across divisions and between regions and headquarters. This is not viewed as a problem; however, there is agreement that communication could be improved.
- Interviewees believe that employees with access management-related responsibilities would benefit from training and education to ensure that the existing guidelines are fully understood and applied consistently.
- There does not appear to be a systematic process for authorizing and recording variances or exceptions from approach standards.
- MDT works with local jurisdictions to review development permits that impact the state system. Where MDT is involved early in the process there are better opportunities to achieve access management goals. Interviewees believe that MDT needs to work consistently with local jurisdictions and educate them on the importance of being asked for input early on.
- It appears that the process for issuing building permits for unincorporated areas, which is undertaken in Helena, does not account for driveway permits. District staff indicate that this is a problem that could be rectified if a checklist item were

added to the building permit review. An example cited involved a drive-through bank with an approved building permit that included as yet unpermitted, non-conforming driveways.

- In addition to increasing MDT employees' understanding of access management, it is important to increase the understanding of the relevant local jurisdictions about how to more effectively address access management issues.

C. Access Classification System—Recommendations

A central element of the recommendations was to implement an access classification system.

1. Principles

The recommended access classification system is based on the following principles:

- Reflect the diversity of Montana conditions.
- Build on functional classification.
- Keep it simple.
- Ensure practical implementation.

2. Recommended System

The recommended access classification system provided in Exhibit 1 on the following page classifies the National Highway System and Primary System into developed, intermediate, rural, and rural very low volume routes, and distinguishes divided (median) routes from undivided ones.

Exhibit 1: Recommended Classification System

Category/Functional Classification System	Undivided or Divided	Area
National Highway System (2,657 miles) (Non-Interstate NHS, principal arterials)	Undivided (two-lane = 2,525 miles)	Rural - very low volume*
		Rural
		Intermediate
		Developed
	Divided (non-traversable)	Intermediate
		Developed
Primary System (Minor arterials) (2,833 miles)	Undivided (two-lane = 2,779 miles)	Rural - very low volume*
		Rural
		Intermediate
		Developed
	Divided (non-traversable)	Intermediate
		Developed

* Rural very low volume roads have a forecast 1997 AADT of less than 2,000 in the year 2007.

As background, Exhibits 2 and 3 describe current and future annual average daily traffic (AADT) on each system.

Exhibit 2:
**Center Line Miles by AADT for Non-Interstate NHS,
Primary and Secondary Systems**

AADT	NHS (2,657)	Primary (2,833)	Secondary* (4,665)
Less than or equal to 2,000	1,727 (65%)	2,521 (89%)	4,525 (97%)
Less than or equal to 1,400	1,196 (45%)	2,266 (80%)	4,432 (95%)
Less than or equal to 1,000	717 (27%)	1,926 (68%)	4,292 (92%)

* The secondary system is not included in the access classification system.

Exhibit 3:
**Center Line Miles by Future Factored AADT for
Non-Interstate NHS and Primary System**

Less than or Equal to 2,000	NHS Lane Miles (2,657)	Primary Lane Miles (2,833)
5 Years	1,514 (57%)	2,521 (89%)
10 Years	1,435 (54%)	2,408 (85%)
20 Years	1,249 (47%)	2,210 (78%)

3. Access Classification System Categories

a. Level of Importance/Functional Classification

The recommended approach uses function as the basis for determining the importance of the route. For the purposes of the classification system, this involves distinguishing between the non-freeway National Highway System routes (principal arterials) and the Primary System, which is comprised of minor arterials.

b. Divided or Undivided Cross Section

The access classification distinguishes between divided and undivided facilities. Divided facilities were defined as those with non-traversable medians. Montana has a very small number of divided lane miles. They are treated separately for access management purposes.

c. Area

The basis for implementing the classification system is that the different specified areas, developed, intermediate, rural and rural very low volume, will be treated differently. The Steering Committee concluded that the existing pattern of driveway access should provide the basis for classifying different roads. The most difficult implementation issues arise from determining how to establish these different access classes.

The following provides the working definitions:

(1) Rural Very Low Volume

The purpose of identifying very low volume rural areas is to avoid changing the status quo in those areas where, in general, the current access management plan and approach permit procedures are satisfactory. All non-interstate National Highway System and Primary System roads that are forecast to have below 2,000 average annual daily traffic (AADT) in ten years time will be in this classification. There will be periodic updates to account for changes in traffic volumes.

(2) Developed Areas

The purpose of the developed category is to recognize that developed areas are those with restricted amounts of vacant land for development. In these areas, implementation of access management is likely to be impractical. The current pattern of access on to the highway will only change through a reconstruction project or a project aimed solely at access management.

The key question is how to identify these areas. Establishing a criterion or threshold of existing approaches per mile provides the starting point for identifying developed areas. We tested a threshold of greater than 25 driveways per mile (on either side). This includes driveways and intersections. Initial testing of this threshold indicates that it provides a practical threshold.

(3) Intermediate Areas

These are key areas that we wish to target through the access management project. They are the areas that are not developed and where MDT is concerned that development without attention to access management will significantly affect the performance and the safety of the system. Therefore, it is important that we establish a systematic and fair basis for identifying these areas. They can be thought of as the transition from developed to rural; however, the boundary from developed is moving out toward the rural. As development occurs in these areas, the access classification system will be proactive and aim to avoid expanding the driveway and access characteristics that we currently see in the fully developed areas.

To identify these areas, they may be most simply defined as the areas where developed ends and before rural begins. Our testing of driveways per mile provides a criterion for this category of greater than five and less than or equal to 25 driveways per mile.

(4) Rural Areas

After initial testing, we recommend a starting point for defining the rural category as those areas that have an AADT greater than 2,000 in ten years and where there are no more than five “non-farm” approaches per mile. The adjacent land use would be agricultural or natural resource-based.

d. Application to Other Roads

The access classification system is applied to the Non-Interstate National Highway System and the Primary System. The Access Management Project steering and advisory committees believe that MDT's access management program should encourage local jurisdictions to adopt similar standards. In addition, implementation must be coordinated with other roadways. In particular, where the NHS or Primary System roads intersect with another roadway, it will be important to protect the roadway up to one-half mile away from the intersection. This will require coordination between the state and the responsible local jurisdictions

4. Approach to Developing the Classification System

The MDT has an image log of the entire system. Pictures are taken every ten meters and are tied to the milepost system. This videolog has been used to test the sensitivity of the classification system to different thresholds.

Among the considerations in establishing the criteria are:

- Ensuring a balance between the intermediate and rural categories in terms of road miles.
- Recognizing that as development takes place in the intermediate category, it could eventually become developed.
- Taking care not to include the many agricultural, seasonal, and rarely used rural approaches.

D. Recommended Access Guidelines

The consultant team developed recommendations to be used by MDT as the basis for driveway spacing and design criteria for the classification system. These recommendations address:

- Desirable access spacing standards and the number of accesses in each category. This does not include farm field or ranch approaches.
- Signal spacing.
- Allowable level of access. This addresses the denial of direct access.
- Access features that should be managed.
- Changes to existing driveway design and intersection criteria. This will include left turns, right turns, medians, and continuous two-way left turns.

The recommendations are presented in Exhibit 4. These recommendations will be refined by MDT and finalized as part of implementation. Stricter standards could apply on reservations or anywhere local conditions support them. In many areas there are access control resolutions already in place, which will be grandfathered.

Exhibit 4: Recommended Montana Access Guidelines

Category	Cross Section	Area	Signal Spacing (mile) Bandwidth	Median Opening Spacing (mile) ¹	Minimum ² Unsignalized Access Spacing (feet)	Denial of Direct Access When Other Available
NHS	Undivided	Rural-very low volume	N/A	N/A	N/A ³	no ³
		Rural	1/2 – 45%	N/A	660	yes ⁴
		Intermediate	1/2 – 45%	N/A	660	yes ⁴
		Developed Access	1/4 – 40%	N/A	250/300 ⁵ – 325/375 ⁵	yes ⁴
	Divided	Intermediate	1/2 – 45%	1/2 F – 1/4 D	550	yes ⁴
		Developed Access	1/4 – 40%	1/4 F – 1/8 D	250	yes ⁴
Primary	Undivided	Rural-very low volume	N/A	N/A	N/A ²	no
		Rural	1/2 – 40%	N/A	660	yes ⁴
		Intermediate	1/2 – 40%	N/A	440, 550, 660 ⁶	yes ⁴
		Developed Access	1/2 – 35%	N/A	250/300 ⁵ – 325/375 ⁵	no
	Divided	Intermediate	1/2 – 40%	1/2 F – 1/4 D	350, 440, 550 ⁷	yes ⁴
		Developed Access	1/4 – 35%	1/4 F – 1/8 D	150	no

1 N/A = Not Applicable F = Full Movement D = Directional Only

2 Stricter standards could apply if supported by other jurisdictions and tribal governments.

3 Considerations other than unsignalized access spacing should govern, sight distance, etc.

4 If alternative access is unavailable, one direct approach may be allowed. For major traffic generators, more than one driveway may be allowed if it is proven to MDT's satisfaction that there will be a significant benefit to the highway network. This will require submission of a traffic impact study by the applicant.

5 Two-lane/multi-lane undivided with or without TWLTL, 250/300 applies to 35 MPH or lower, 325/375 applies to >35 MPH <45 MPH.

6 440 applies to 45 MPH posted, 550 applies to 50 MPH posted, 660 to 55 MPH or above.

7 350 applies to 45 MPH posted, 440 applies to 50 MPH posted, 550 to 55 MPH or above.

E. Access Elements to be Included in Montana Approach Standards and Roadway Design

The following access guidelines and design criteria will need to be established for implementing the classification system:

- Unsignalized access spacing.
- Traffic signal spacing.
- Roadway cross section (i.e., undivided two way left turn lanes (TWLTL) versus nontraversable barrier) and approach access type (i.e., full movement, right in/right out, etc.).
- Turn-lane warrants.
- Access separation distance at interchanges.
- Driveway off sets.
- Updated typical approach designs.
- Corner clearances.
- Thresholds for when traffic impact studies are required.
- Variance procedures for when established criteria cannot be met.
- Appeals process for when an application is not approved or the terms and conditions of the permit are not acceptable to applicant.
- Procedures for dealing with retrofit situations.
- Frontage road set back standard.

F. Implementation Plan

1. Implementation Plan

The major work elements required for implementation are summarized in Exhibit E-2 on the following page. The implementation elements include:

- Establishing the access classification system.
 - This involves pre-testing and applying the recommended categories to the system to establish the new access management plan.
- Developing and adopting new approach standards.
 - This requires public process to update 1983 Montana Approach Standards.

- This requires defining MDT procedures, organizational roles, and responsibilities.
- Implementing access control resolution projects to purchase access rights in the NHS intermediate category.
- Establishing procedures for working with other jurisdictions.
 - These will be in the area of subdivision review and access management strategies.
- Incorporating access management-related design criteria into roadway design manual.

MDT will be proactive in areas that are classified as intermediate. This will involve purchasing access rights as part of access control resolution projects. Evaluations developed by the Right-of-Way Bureau, based on their experience in the recent Florence to Lola project, indicate that these types of projects will cost approximately \$12,000 per mile.

In considering these costs, it is important to note that they are not net new costs to MDT. In practice it is expected that most access control resolution projects will take place on sections of the highway system that are likely to have reconstruction projects in the next ten years. Currently, when these types of reconstruction projects take place they involve access control resolutions and incur the same \$12,000 per mile costs. The access control projects are, in effect, making the investment up front to preserve the corridor. It is also possible that in corridors where the land use will change over the next ten years that there could be a financial advantage to the state in undertaking the access control project in advance of reconstruction because access rights would be purchased based upon the current land use and cost.

The access guidelines would be applied to all new driveway permit applications and govern the design of driveways for reconstruction projects. The outcome from their application would be preservation of existing capacity and improved safety.

2. Implementing Authority

The access classification system will be implemented using MDT's existing authority. This will be in keeping with how MDT has applied standards in the past. Through its general police powers and responsibilities to protect the public health, safety, and welfare on state highways, the MDT and Commission may implement appropriate engineering standards and procedures to manage, by regulation, access on highways. MDT's current approach to regulating driveway access is specified in the Administrative Rules of Montana (Chapter 5, Preconstruction Bureau, Sub-Chapter 1, Highway Approaches).

It is recommended that the new access classification system is implemented through the same authority as the current approach standards that were established using MDT's administrative rule-making authority. This will be in keeping with how Montana has historically managed access. For example, the preface in Sub-Chapter 1, "Highway Approaches," Chapter 5 of the administrative rules states that the rules: "... apply to all highways under the Federal Aid System. The frequency, proper placement, and construction of points of access to highways are critical to the safety and capacity of those highways. Those regulations are intended to provide for reasonable and safe access to highways, while preserving the safety and utility of the highways to the maximum extent possible...".

3. Implementing Mechanisms

The basis for implementing the access classification system is through the following mechanisms:

- MDT reviewing, refining if necessary, and then adopting the access guidelines as the statewide access "plan" or objectives for the National Highway and Primary Systems.
- Undertaking access control projects using the access control resolution process. This involves purchasing access rights in areas classified as intermediate.
- Updating and amending the 1983 Driveway Approach Standards to establish the guidelines as standards that apply to issuing driveway approach permits.
- Applying the access guidelines as standards governing driveway spacing and other design criteria in projects that are subject to access control resolutions.
- Improving communication and coordination with the appropriate land use planning authorities.









Ensuring that MDT employees in headquarters and the Districts are trained in and consistently apply the access guidelines.

4. Organization

The Steering Committee recommends appointing an access management coordinator. The coordinator would serve as team leader for implementation and then be full-time basis to the role of access management coordinator. It was recommended that this function be located within the Highway Division in Preconstruction.

A team-based approach is recommended for implementing the classification system that involves the affected Divisions and Districts.

Exhibit 5: Major Work Elements of Implementation Plan

Major Work Elements	Year 1 (months)												Year 2	
	1	2	3	4	5	6	7	8	9	10	11	12	1	2
Establish Implementation Team														
1.0 Adopt Classification System														
2.0 Revise Approach Standards														
3.0 Establish Procedures for Coordinating with Other Jurisdictions														
4.0 Address Access-Related Design Criteria in Roadway Design Manual														
5.0 Program Access Control Projects														
6.0 Incorporate New Approach into MDT's Existing Business Practices														
7.0 Communicate Changes and Provide Training														

Symbiotic, Opportunistic, Omnivores
A Perspective on New York's Arterial Access Management Initiative

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At its inception in 1993 NYSDOT's access management efforts focused on emulating the widely recognized, top-down initiatives of Florida, Colorado and New Jersey. By late 1994, however, this approach had been abandoned as there was little effective support for what was perceived to be an intrusion on local government prerogative in a home-rule State. Since then, however, New York's initiative has evolved into what is arguably one of the most successful, bottom-up, access management programs in the Northeast --with roughly 12 new and 24 on-going projects and direct interaction with over 30 new local project candidates in 1999.

This paper examines this initiative and simply asks the question, "How were three people with no defined role in transportation planning, project development or the highway work permit process, and no direct influence over local land-use planning and management, able to create a program with ongoing collaborations in well over 30 communities?" The answer, we (the Arterial Access Management Team) apply techniques that facilitate state-local collaboration in an environment where participation by the major actors is largely voluntary.

This paper discusses the five principal techniques that we employ: (1) be opportunistic - focus on high potential areas but be flexible and respond to unanticipated events; (2) use the right bait, self interest -- provide solutions that benefit all parties in their own terms; (3) focus on broader objectives -- recognize that the benefits of access management transcend traffic safety and efficiency; (4) recognize and overcome barriers to cooperation - devise ways to work with decentralized multifaceted organizations and resolve turf issues; finally (5) build teams using local leaders -- achieve success by using local officials and regional staff as leaders, salesmen and catalysts ...in their community and beyond.

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Target Critical Areas Using Capital Projects as a Catalyst

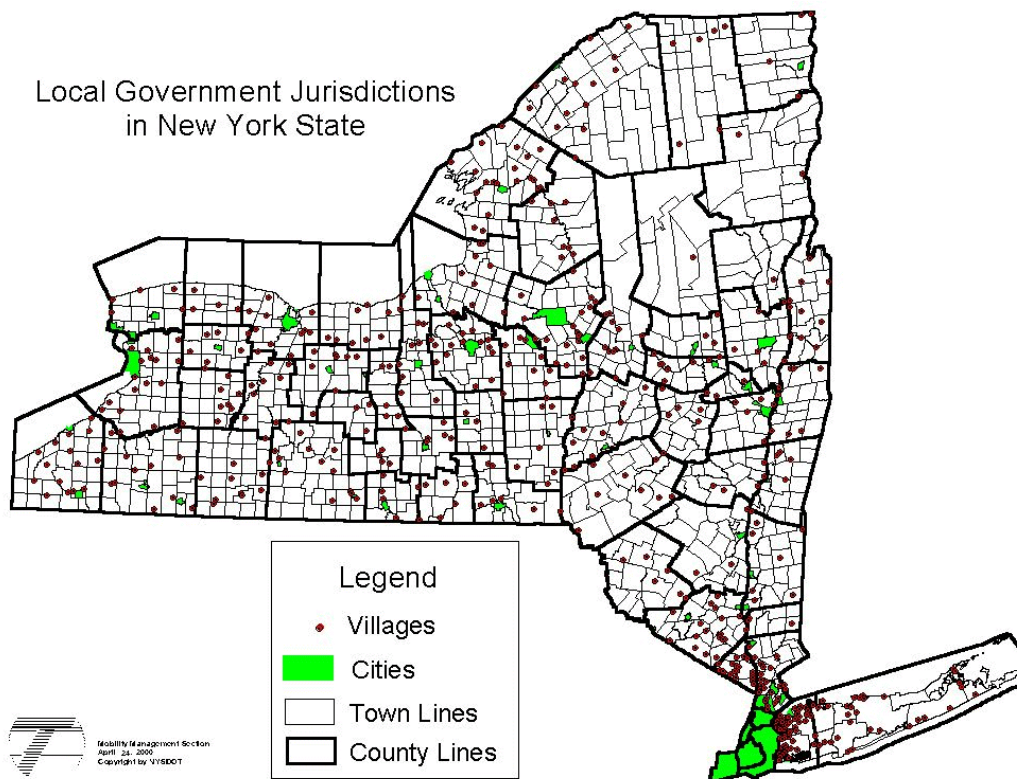
Because New York State contains over 1600 separate local governments with land use authority, we realized early on that we needed to target outreach efforts. Thus, we work with the Department's regional offices to identify growth corridors with the greatest potential for access managementwhere our limited resources can be used to best effect.

State highway projects on these growth corridors further refine our focus, and often provide a catalyst to implement local initiatives. Reconstruction, widening and even pavement enhancement projects provide an influx of resources and create a sense of change that, in concert, provide impetus for local action. We routinely use projects to fund driveway consolidations and interconnections and a number of projects have also included elements to improve the local road system. This is especially important when local economic conditions are not favorable to retrofits; that is, the project provides an opportunity to implement access improvements that the private sector is not able or willing to fund on its own.

Effective use of a highway projects as a catalyst for a local access management initiative requires that outreach be carefully coordinated with the project schedule. In some of our earlier efforts,

Figure 1: Integrating Land-Use and Transportation Management: Transportation related land-use management in New York is dominantly a local government responsibility (below). There are, however, 1,609 localities in New York --62 counties, 62 cities, 932 towns and 553 villages (bottom) with very different developmental environments and transportation needs. These basic facts were fundamental in defining two elements of the Arterial Access Management Initiative: its focus on growth corridors and the necessity of tailoring each access initiative to the specific needs and objectives of the community involved.

<u>Element</u>	<u>Local Authority</u>	<u>State Authority</u>
Comprehensive Planning	Yes	No
Zoning	Yes	No
Subdivision Approval	Yes	No
Site Plan Approval	Yes	No
SEQRA (Lead)	Yes	State Projects
GEIS	Yes	?
Advance Acquisition (ROW)	Yes	Yes
Official Mapping (ROW)	Yes	No
Transportation Planning & Mgmt.	Local System	State System
Highway Work (Access) Permit	Local Roads	State Roads



we initiated outreach to local governments during the design phases of a project.¹ Unfortunately, this practice didn't always allow enough time for access management to be assimilated by the community, translated into actions to be added to the project, and "sold" to individual property owners.² Beginning this process during the design phase, thus, occasionally placed our regional offices in the uncomfortable position of choosing between a design which did not include access elements or delaying the project until these access elements had been approved by the locality.

As we don't want to cause project delays, we now work with our regional offices to schedule outreach well in advance of project scoping. This generally allows sufficient time for local consideration and the identification of access management elements that can be incorporated into the project. Projects do not have to be delayed while the community "digests" access management concepts and develops a program to implement them locally.

While alignment of our outreach activities with NYSDOT projects is our principal targeting tactic, other opportunities abound. Participation in the local government comprehensive planning process is also very important and can lead to a broader and more effective set of solutions than might be achieved through alignment with a NYSDOT project alone. In other communities the specter of rapid commercial development and/or deterioration of the village/city core has been enough to spark a willingness to initiate an access management program. It often comes down to being opportunistic: participating in local planning and development activities to keep ideas "floating" until the situation is ripe to implement access management.

Customize Outreach to Each Community

A large part of our time is spent developing and delivering access management presentations and training materials to local governments and NYSDOT staff. These presentations are designed to familiarize audiences with basic access management concepts and to present access management projects that illustrate the potential benefits. These presentations provide a venue to engage local governments in discussions about access management in a way that, when the conditions are right, leads to further collaborations and eventually access management projects.

¹ The project development process in NYSDOT generally follows a sequence from needs assessment, through project scoping, to various preliminary-to-final design phases, and finally the initiation of construction. This sequence can take from 2 to 8 years depending on the scale and complexity of a project; and occasionally more for projects of regional or state significance.

² Attaining local acceptance for an access management plan can also take years as it involves selling a variety of entities on its benefits. These entities often include the town supervisory and planning boards; the town attorney, public safety and code compliance officers; (and) business organizations and public interest groups. As their interests almost always differ and more than occasionally conflict, this can be a complex undertaking.

Customizing each presentation to reflect the situation of the particular audience and community adds greatly to its effectiveness. Adapting generic presentations by adding real local examples and by addressing real local problems (and omitting the irrelevant) is much more effective in engaging the audience. Thus, we take the time to visit the locality and take pictures to illustrate good and bad access configurations, and utilize local aerial photography, zoning and plat maps to illustrate larger concepts. The access management projects that we use for examples are those that most closely reflect local conditions and potentials. Doing this, of course, takes time and effort but, in our experience, it is time well spent.

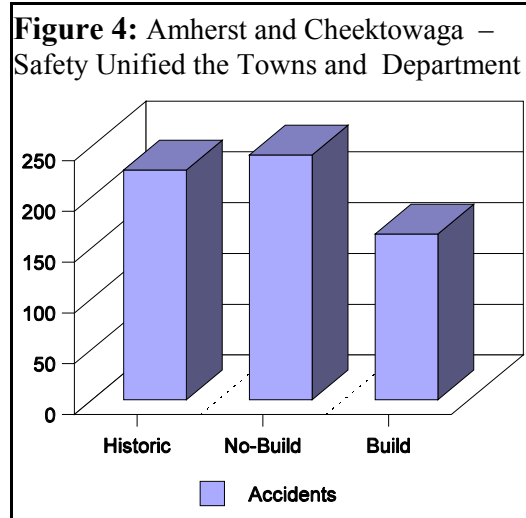


Win/Win Solutions Are Essential

The only truly sound basis for successful, cooperative state-and-local projects is the achievement of real benefits by both parties. Access management makes for good cooperative projects because, in general, both state and local officials share an interest in keeping traffic moving safely and efficiently. Once shared goals have been identified, however, it is important to articulate them in terms that are specific to the project and clearly understandable to the participants. For example, we are currently involved in a project in the towns of Clarence, Lancaster, Cheektowaga and Amherst along 1.5 miles of a highway that is already largely built out with retail development. The project involves reconstructing the roadway to add an additional travel lane in each direction, converting the two way left turn lane to a raised median, adding sidewalks, and consolidating commercial driveways to reduce the total access points from 65 to approximately 45. Because both the Department and the Towns recognized the importance of selling the need for driveway closures and consolidations to the affected property owners, we decided to emphasize the project's safety benefits, as shown in Figure 4.

Shared transportation goals are not always present, clearly identified or valued sufficiently by all parties to sustain cooperation, however. In such cases we may employ a variety of tactics.

We always accentuate the positive. We have, for example, worked with communities where local interests strongly advocate reduced speeds but where NYSDOT staff have often spent years resisting speed reductions in an effort to preserve mobility. Generic pamphlets and presentations emphasizing the safety, mobility and speed benefits of access management are not useful in the face of such conflicts, so we tailor the approach to emphasize the benefits that are shared by both the state and local government.



Quite often, the key to defining a commonly acceptable project in the face of differences over the value of “transportation” benefits is as simple or complex as defining “value” in the other party’s terms. For example, we participated in a cooperative effort to develop an access management plan in conjunction with a proposed highway widening project in on Rt. 332 in the Towns of Farmington and Canandaigua. The original project scope developed by the Department called for widening from 2 to 4 lanes and intersection and drainage improvements. The planning process established a project team that included representative of the town governments, the access management team and NYSDOT regional staff and resulted in the addition of a restrictive median, preconstruction of future intersections and the cooperative development of new access roads. These elements had value to both the Towns and NYSDOT, but different value, as shown in Figure 5.³ A classic win/win situation was defined and resources used in a way that allowed each party to contribute what it could best afford, thus broadening the project’s overall benefits.

This type of project is more common than not, as in many projects each participant has distinct objectives and values, a distinct value system, and distinct responsibilities. It is not necessary to have the same goals to achieve symbiosis. All that is needed is to define actions from which each participant benefits in their own terms.

Another technique we use is to increase goodwill by finding non-traditional ways to help a community. For example, in one case the NYSDOT regional office initiated a reconstruction

³ As the Department could not absorb the full cost of constructing the local roads, the Project Team worked out an agreement whereby the towns would acquire the ROW and construct the base and NYSDOT would pave the roads during its highway project. This allowed the towns to use resources available to their highway departments and NYSDOT to access economies of scale by including the paving as part of a bigger project.

Figure 5: Value Is A Matter Of Perspective and Objective – the Case of Rt. 332

<u>Access Elements</u>	<u>Value to NYSDOT</u>	<u>Value to Towns</u>
Restrictive Median	Safety – reduces and manages left turns	Improved aesthetics and better control over the type and size of development
Preconstruction of Future Intersections	Predictability in the development of local roads and better intersection spacing at full build-out	Reduced local costs for advanced completion of local road network
Access Roads	Safety, mobility, capacity – fewer turning movements and reduced local traffic on Rt. 332	Reduced local costs for advanced completion of local road network, improved opportunity to expand tax base away from Rt. 332

project at the same time that we'd been providing the village planning board with support in developing a comprehensive plan and access management ordinance. During discussions on the comprehensive plan we discovered that the Town had plans to fill a swale to provide a village park and was in the process of planning to replace its water main –which was under the road in a section we proposed to reconstruct. We linked the two and persuaded the regional office to use fill that would be generated by its project to fill the swale as well as coordinate its re-paving project with replacement of the water main ...which allowed the Town to save money. The goodwill, in turn, contributed to selling elements of the access management ordinance that might otherwise have been difficult to implement.

The strongest basis for sustained action is self interest. It follows that successful cooperative projects must have win/win characteristics and that the best projects have multiple benefits. Effective cooperation also magnifies benefits and stretches resources. And, the fact is that there are many potential opportunities for state and local cooperation. A major thrust of our efforts is, thus, identifying opportunities for cooperation and then articulating them in the form of projects that benefit both the Department and the communities involved.

Broaden the Perspective

The natural tendency within state transportation agencies is to focus on activities over which they have the greatest control ...and these are often the improvement of road and driveway configurations as part of a capital project. But, when a capital-project orientation to access management is over-emphasized, long range land use planning is often missing. And in high growth areas, the density, type and location of development and the quality of the developing local

road system will have transportation impacts that can easily overwhelm the benefits of even the most well conceived highway capital project. Thus, state transportation agencies have good reason to support efforts to coordinate land development and transportation development.

Planning, management and control of development is based on a broad set of needs and objectives, however, and these are primarily local in nature. Aesthetic, quality of life, economic, environmental, and property tax base objectives are as important to local officials and citizens as transportation benefits, and often more so. Consequently, state transportation agencies need to broaden their traditional perspective if they are to work successfully in cooperative access management projects that encompass long term land use considerations.

By actively participating in town master planning we work to put these local objectives into terms that the Department can accept, support, and contribute to, often acting as advocates for the local government interests to the NYSDOT regional offices. And we act as transportation and land use planning consultants to the towns- helping them to define aesthetic, quality of life, economic tax base and environmental implications of transportation decisions and the transportation implications of land use decisions. In doing so, we often represent NYSDOT's interests in the local government arena.

An example of such broader considerations occurred in the case of the Town and Village of Livonia which are facing heavy growth pressure and a pattern of development which threatens their "quality-of-life" (Figure 6). To address these problems the Town developed a master plan emphasizing three over-arching objectives: enhancement of the existing village and hamlet environments as desirable locations to live; preservation of green-space and agricultural areas as both economic and social assets; and establishment of conditions enabling more robust and diverse economic growth. We participated in working session with the town planners and their planning consultant providing land use and transportation expertise.

The principal tool applied to accomplish the town's objectives was re-zoning, to concentrate: residential development in and around the Village and provide for very low density development with clustering incentives elsewhere; commercial and retail growth in areas that were already substantially developed; and industrial development in one area that could take advantage of multi-modal access.

Further, recognizing that a high quality transportation system is necessary to attract development and maintain a high quality of life, the Town worked with us to formulate a transportation strategy intended to reduce the traffic impacts of development. The strategy included a broad access management ordinance; the inter-connection of local roads, sidewalks and bikeways as development occurs; and, locating high-volume or truck generating users on a new road which would largely by-pass the existing arterial and collector network. We are now assisting the Town in developing a financial package to design and construct the new road

The communities we work with vary greatly in terms of size, location, needs, and capabilities. Because of these differences, the support and services we offer also vary and we tailor our assistance to the needs of the community. In some cases we may act as surrogate consultants broadlyproviding general transportation planning input with an access management perspective. In other cases, and particularly where greater planning resources are available, we may fill more circumscribed roles: walking the participants through the trade-offs inherent in linked land-use and transportation actions, providing information and peer-to-peer contacts, assisting in the management and review of consultant efforts, and supporting the drafting and completion of plans and ordinances.⁴

Team Building is Critical

With three staff members our ability to support active projects is limited. We have, thus, focused on developing local and regional capabilities to take leadership roles in access management. There are a number of techniques we using to encourage this kind of behavior.

We start by recognizing that we are, in most senses, simply *agents provocateurs*. That is, we may have a rational public objective but we do not have nearly as large a stake in the results as do the citizens and officials in the communities involved (or staff in our regional offices, for that matter). We use our outreach efforts to sell the desirability of implementing access management programs to local communities, but once they're ready to act we position local officials in the leadership roles. Their insight into local needs and objectives, understanding of what is and is not reasonable in the context of the community, and ability to "make and sell" decisions in the context of local politics are fundamental to implementing a successful project.⁵

Once we've completed a successful project we ask these local leaders (generally regional and local government officials and staff) to act as advisors to their peers in other communities. This is often simply accomplished with a phone call putting, for example, the supervisor in Town A in contact with the supervisor in Town B. Not only is this more efficient than trying to do it all ourselves, but the message is generally more credible when it comes from a peer with practical experience in the issue at hand.

We also offer a variety of hands-on training workshops for local government and regional personnel. These focus on specific, real world site plan and zoning subdivision reviews, for

⁴ Some of the more common themes in these collaborations include the identification of corridors for which access management plans are desirable; modification of zoning to concentrate commercial development; classification of roads and the development of appropriate frontage and driveway spacing standards; and analysis the local road system to identify desirable links as well as opportunities to interconnect subdivisions and construct new local roads.

⁵ ALL our projects are collaborative. We will not participate in an access management project absent direct participation by local officials.

example, and begin to build the skills needed to implement access management plans at the local level. We include local officials and/or staff as case facilitators in all workshops.

Beyond that, we leverage our capabilities by tapping into other regional and state organizations. The metropolitan planning organizations are a significant source of professional talent and funding and we often work with them to reach local governments.⁶ Academic venues, such as the Cornell Local Roads Program, provide entrees to local transportation officials and also serve as a source of expertise when specific issues arise. We collaborate with other state agencies such as New York State Department of State (which has an extensive and ongoing training and assistance program for local officials) and a number of state-wide interest groups such as the New York State Association of Towns and the New York State Planning Federation.

Recognize and Overcome Barriers to Cooperation

While there are many good reasons for state/local cooperative projects, anyone who has worked to establish them knows that there are also reasons for not cooperating. One of the most pervasive obstacles to cooperation is the fact that both the NYSDOT and local governments are multifaceted, decentralized organizations. This can make it difficult to get commitments that hold for all parties over the life of a project. A planning board's willingness to work toward an access management ordinance, for example, does not mean that the town board will accept the ordinance. Similarly, adoption of a local access management ordinance does not automatically commit the NYSDOT regional traffic engineer to support the ordinance when making highway work permit (driveway) decisions on a state road.

One strategy that we commonly use to obtain a continuing and cooperative effort is to form a core project advisory committee consisting of representatives from all of the key groups in NYSDOT and the locality. This typically includes representation from the town board of supervisors, the planning board, public safety office, and highway department as well as the planning, traffic engineering and design groups from NYSDOT.

While we've called these groups "advisory", advice is not their most important activity. Instead, their key function is to build sustainable commitment to the project. And, typically, during the course of the project the advisory committee will be called on to help "sell" access management concepts and the merits of the project to ever widening constituencies. And, typically, they will develop loyalty to the core advisory group that is important in resolving differences in objective, approach and cooperation.

Obtaining initial commitments from the highest levels in the respective organizations can also be helpful, particularly where significant resource commitments are involved. On one cooperative

⁶ One effective opportunity is, for example, through participation in the development of the MPOs' Unified Planning Work Program (UPWP), and several of our MPOs now include access management activities in their work programs.

project involving two towns, for example, we decided that a memorandum of understanding stating the intention and objectives of both towns and the Department was necessary. The resulting memorandum was endorsed by the two Town Boards and signed by the NYSDOT regional director.

There are also turf issues to be addressed. As Main Office staff we must be sensitive to the prerogatives of our regional offices. As they are ultimately responsible for what goes on in their region, it is easy for them to view our involvement with some suspicion. To resolve this, we try to position ourselves as working “for” them by informing them of any contacts we have in there region, including them in correspondence (generally in advance of distribution to others), seeking their advise, actively involving them in projects, and defining strategies to advance their priorities. Our ultimate goal is for them to view us as a resource for regional success.

Finally, we recognize that personal relationships are important. We try to call or drop in on our access management friends whenever we’re in town. And, when the planning board or advisory committee meeting reconvenes at a local tavern after an evening of business, we try to be there because we value the relationships that are formed there and the work that sometimes gets done there. Who says access management isn’t a good time?

Conclusion

In our experience defining access management opportunities for any project from a technical perspective is relatively straight foreword. That’s not to say that it doesn’t require substantial expertise, knowledge or resources ...but simply that technical options are definable and lead to generally predictable solutions. It’s the institutional, political and human elements that are less predictable, less tangible, call for greater creativity and flexibility, and that ultimately determine whether an access management solution will be acceptable and implemented.

That being the case, we focus the majority of our effort in addressing these human and institutional issues. And, as discussed, there are five dominant tactics that we employ: (1) be opportunistic - focus on high potential areas but be flexible and respond to unanticipated events; (2) use the right bait, self interest -- provide solutions that benefit all parties in their own terms; (3) focus on broader objectives -- recognize that the benefits of access management transcend traffic safety and efficiency; (4) recognize and overcome barriers to cooperation - devise ways to work with decentralized multifaceted organizations and resolve turf issues; finally (5) build teams using local leaders – achieve success by using local officials and regional staff as leaders, salesmen and catalysts ...in their community and beyond.

For the 4th National Conference on Access Management

Category: Access Management in the Planning Environment

Presentation Option: Paper/Presentation

Title: Integrated Transportation Management

I. Introduction

Long range planning of transportation projects cannot be successful if land use is not considered in the equation. Typically, in the amount of time it takes for a major transportation initiative to go from concept through design and construction to completion, many years will pass. In that amount of time, changes in land use can be so significant that the best corridor options have been foreclosed. Changes in demand and travel behavior can be so significant that the project no longer offers an appropriate solution to the problems at hand. Preserving corridors through outright purchase is one way to approach this problem, however, it presents its own challenges. Attempts to preserve a corridor short of purchase are often frustrated by property rights concerns or shifting politics. *Integrated Transportation Management* answers this dilemma thru a series of related and often parallel stages that include the following:

- identification of critical corridors,
- partnering at all levels of government,
 - alignment study,
- preparation of a legally binding corridor master plan,
- design study, including a management plan, and
 - corridor management prior to construction.

II. Stages of Integrated Transportation Management

A. Identification of a Critical Corridor

A *critical corridor* is any transportation corridor that, due to developmental pressure, is in need of an increased level of management to preserve capacity and functional integrity. These can be corridors that are already operating above or near capacity with severe crash rates, or corridors that are currently under capacity with low crash rates where developmental



and traffic volume growth is projected or anticipated. The latter, obviously, is the preferred exception; though in the real world, the former is the general rule as these corridors receive the greatest public attention and thus support. Regardless, designation of a specific corridor as critical and minimum standards of operation are mutually agreed upon across state, county, and city levels of government. Cooperation with local partners is critical. Political subdivisions of the State (e.g. counties, cities, etc.) by statute, carry the authority to manage land use and so bring valuable abilities into the partnership. One such example is K-4, in Jefferson County, Kansas, north of Topeka, the state capital.

Case Study: The K-4 corridor designation consists of a 16 mile segment from the Shawnee/Jefferson county line to the north junction of K-4/K-16 near Valley Falls. This segment is designated based on a tremendous growth potential as well as a matter of route continuity. The new Oakland Expressway in east Topeka will connect K-4 with I-70 and will bring K-4 to the forefront both as a commuter route and a freight route between Atchison, Topeka, and the remainder of the state. Further, this segment is on the National Highway System, carries from 3000 to 8500 vehicles per day, and is already the subject of an advance preliminary engineering study.

B. Partnering Agreement

A *partnering agreement* is entered into by the Secretary of Transportation, county, and affected cities to specify critical corridors and to identify common interests and goals in the management of these critical corridors. This partnership is supported as needed by entering into agreement for projects to retrofit or otherwise improve critical corridors. The partners can reasonably expect mutually identified interests and goals to be upheld and implemented by one another. The partners agree to share information, resources and decision-making in the management of critical corridors. The purpose of this partnership is to enhance the management of the public investment in transportation by improving safety and traffic operations and encouraging uniformity in the management of critical transportation corridors.

Case Study: A partnership, which forms the basis for work on a corridor master plan, has been entered into between the KDOT, Jefferson County, and the cities of Meriden, Ozawie, and Valley Falls. The partnership agreement document is known in Kansas as a *Memorandum of Understanding*; a copy is included in the appendix.



C: Advance Preliminary Engineering (APE) Study

Once the critical corridor has been selected and the partnership agreement signed, the *advance preliminary engineering (APE)* study can begin. The APE study is simply a study of possible alignments with recommendation. The first step in this alignment study is to analyze future conditions based on existing geometry and cross-section and projected traffic

volumes. Understanding how the corridor might operate in the future under a no-build scenario directs policy decisions as to functional classification and cross-section (i.e. super-two, four-lane expressway, freeway, etc.) Once the facility type and cross-section have been established, possible alignments can be studied. The alignment study analyzes potential corridor alignments, with consideration given to horizontal and vertical features (such as drainage and grade,) structures, environmental factors, socio-economic factors, and future land-use. Typically, this will involve consideration of an upgrade to the existing alignment as well. Alternatives are narrowed to about three most feasible choices. The public is involved throughout the entire process and a public involvement plan is an integral part of this stage. The APE study concludes with recommendation of a preferred alignment. It does not, however, contain a sufficient level of detail to establish a project centerline, right-of-way limits, or environmental clearances.

Case Study: The advance preliminary engineering effort has already undertaken feasibility analyses on several corridor options and has eliminated several infeasible scenarios. Completion of the study is scheduled for autumn of 2000.

D: Corridor Master Plan

With the conclusion of the APE study, the corridor management effort can resume. This stage of the effort integrates the regulatory abilities of the partners toward a common end, namely the preservation of the adopted corridor and coordination of future developments. The *Corridor Master Plan (CMP)* is a contractually binding document upon all signatory parties and their successors that defines parameters for transportation management, access management, land use and development characteristics for a proposed corridor alignment. It documents the vision for the future corridor and utilizes the information in the APE study to formally adopt a corridor. The CMP is a dynamic document that begins in general terms and evolves over time to incorporate more specific design details, changes in industry standards, or other changes that may occur. It includes land use planning elements for newly developing or redeveloping areas to prevent or minimize new permanent structures in the corridor. It also includes operational features to attempt to retrofit established areas such as relocation and redirection of access or traffic circulation patterns. The plan does not identify specific projects, rather, it begins the process of preserving a corridor for future construction and identifies advance acquisition and retrofit priorities. From information contained in the CMP, specific projects and agreements can then be drawn

Case Study: A sample corridor master plan for the K-4 example is included in the appendix.

E: Design Study, Management Plan, and Access Plan

The *design study*, or preliminary engineering, carries a project from proposed corridor alignment to a set of construction plans ready for bid letting. The first step, naturally, is to establish the project centerline. Once the survey grade centerline is established, a *Management Plan* can be detailed, including right-of-way limits, setback limits, and an acquisition schedule. The management plan is adopted into the corridor master plan. The management plan will also include an *Access Plan*. The KDOT has recently adopted access planning as part of the design study process. Access planning is applied to any major construction project that is a) located on a segment of corridor with an existing CMP, b) located on the National Highway System, c) involves, approaches, or bypasses an incorporated area, or d) involves a new alignment. The access plan documents how access will be managed once the project is open to traffic. Factors such as minimum access spacing, location of intersections, and level-of-service thresholds are specified. The design study and management plan serve to integrate the implementation phase of the corridor preservation effort. Specific guidance can be given developers regarding required dedication of right-of-way or access control, future access to their property and setback for structures. This information will guide the site design process and result in development that is poised to take advantage of the corridor improvements rather than be victim of the process.

Case Study: A design study and management plan to preserve the corridor will follow completion of the APE study and CMP. It is recognized that funding for construction is not likely for at least 10 years, so preservation and coordination are top priorities. For example, while an APE study is progressing, land speculation and rezoning or platting applications tend to flood municipalities and counties as people along the proposed corridor scramble to “protect their interests.” For this reason, the KDOT is suggesting in this case that a temporary moratorium on building permits within the corridor be put into effect until such a time as the study is concluded and the right of way limits defined. Needless to say,

this is an extremely risky maneuver. Property rights issues are at stake and this proposal will very likely bring a flurry of legal and political challenges. One likely challenge is that KDOT is attempting to hold down the value of the real estate in expectation of future condemnation. This is not the case. The moratorium will not apply to zoning, platting or subdivision of property, it will apply only to building permits. It is recognized that the public will be obliged to pay fair market value based upon the highest and best use of the property whenever it is acquired. The goal is to prevent or minimize demolition of buildings and relocation of families and businesses. The next likely challenge is that KDOT is affecting a permanent restriction on the use of the property. It is very important that the moratorium have a date of expiration written into the resolution. This is needed to show that the regulation is temporary in its effect and will not unduly burden the property owners in the corridor. The expiration of the moratorium should be set at not more than 30 calendar days after the scheduled completion of the design study. This proposal has not gone forward yet, so the results of such an effort can only be speculated.

F: Management of the Corridor (prior to construction)


With detailed construction plans on the shelf, waiting for funding, management of the future corridor in the interim based on the corridor master plan is critical. Parcels of right-of-way are acquired in accordance with the prioritization schedule as opportunities arise and funding becomes available. Platted dedications and enforcement of setbacks will keep the corridor clear of permanent structures. New development should be positioned to take advantage of the new highway. Variances to the plan should be avoided wherever possible; though variances for temporary situations may be possible. When managed properly, the corridor will be free, or nearly free, of permanent structures, and will leave a path of least resistance to the construction of the new highway.

III: Conclusion

Given the status of property rights in most states, it is likely impossible for any one level of government to successfully preserve a transportation corridor and effectively coordinate land use at the same time. Commonly, state agencies have little or no land use management authority and county and city authorities have little or no influence over the state controlled transportation systems. Thus, as proposed by the American Planning Association's (APA's) *Legislative Guidebook*, a vertically and horizontally integrated approach is necessary. Vertical integration, as explained by APA, means that city, county and state planning documents (and federal, if applicable) should be logical and congruent when compared side by side.

The Kansas Department of Transportation has applied this concept to the problem of identifying and preserving future transportation corridors with the following anticipated benefits: Partners at all levels of government agree upon the transportation need and the most appropriate way to meet that need; public involvement is more thorough and better coordinated; environmental review and documentation receives better oversight; and finally, once the need is established and the best alternative adopted, land development can be coordinated to minimize impacts from the proposed project.

In summary, a plan to identify and preserve corridors for long-range planning purposes depends upon an integrated planning effort whether new alignments or upgrading existing alignment is involved. Integration must include purpose, planning and implementation in order to be effective. With such integration, long range transportation planning will prove to be worth the effort.



Minnesota

Land Use and Access Management Program Update - August 2000

Presented by Lisa J. Press, Mn/DOT Office of Investment Management




Access Management Initiative 1997-1999

Research Conducted:

- Market Research-public attitudes
- Systems Thinking
- Legal Analysis
- Crash Rate Analysis
- Land Use Planning Analysis
- Permitting Practices
- Access Classification System
- Review of National Practices






1999 Report to Legislature

Recommended Mn/DOT Strategies:


- Partnerships
- Education
- Guidelines
- Incentives






Mn/DOT adds Access Management Unit


Traffic Engineering Office-Spring 1999
Initial Staff: 2 Planners & Engineer
Office of Investment Management-July 2000
Attorney hired-Aug. 2000.
Consultants retained for assistance



Interregional Corridor System

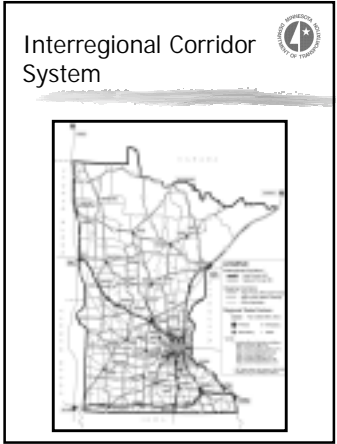
Roads linking state's major trade centers
Key element in 2000 legislative funding proposal
Corridor Management Plan process developed
Priority for MnDOT access management efforts





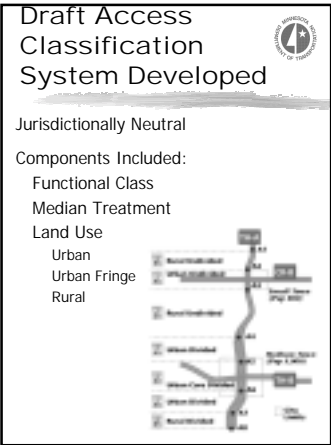
Minnesota Road System

Road Type	No. of Miles
All Roads	131,000
State Trunk System	12,000
Principal Arterials	5,200
<u>IRC System</u>	<u>2,900</u>
<u>High Priority IRC's</u>	<u>1,000</u>



IRC Performance Goals

Corridor Type	Corridor Performance Target Speed (MPH)
High Priority	• 60+ MPH
Medium Priority	• 55+ MPH
Regional	• 50 + MPH



Revising Guidelines to Support IRC System

Originally based on Functional Class

Differentiate Principal Arterials

Added a performance component-speed based

Emphasis on:

- Minimizing signal proliferation
- Maximizing signal operations for through movements on higher level roads

Revised Access Category System

Category	Roadway Function	Facility Type	Speed
1	Urban Arterials & High Priority BRTs	Expressways (4+)	Urban: 55-65 mph Rural: 70 mph
2	Principal Arterials & High Priority Regional Corridors	Expressways (2+)	Urban: 60 mph Rural: 65 mph
3	Rural Main-ABC Roadways	Two-lane (2+)	Urban: 45-55 mph Unimproved: 30-40 mph
4	Principal Arterials & some Minor Arterials in the Metro area	Multi-lane Divided	Unimproved: 45-55 mph
5	Minor Arterials	Two-lane and Multi-lane Mostly Unimproved	Unimproved: 30-40 mph
6	Collectors	Two- & Four-lane Mostly Unimproved	Unimproved: 30-40 mph
7	Access Management Plans adopted by both the road authority and the land owner	Set by plan	Set by plan

(7/2008)

Access Guidelines - Issue Areas



Speed on IRC's through urbanizing areas
45 mph - high speed
Jurisdictionally neutral
cities and urban counties v.
rural districts and counties
Statewide consistency in a decentralized organization

Local Partners Demonstration Projects



Underway in 2000:

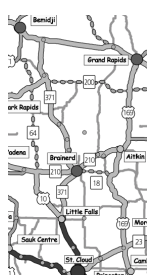
Trunk Highway 371 Land Use & Transportation Plan

Trunk Highway 7 Access Management Ordinance

Trunk Highway 371 Land Use & Transportation Plan



2 Counties-MN
Lakes Region
Planning Grant-MN
Planning
MnDOT added
Funds for Local
Transportation
Plan- IRC
Project Challenges:
weak state
planning
environment
no. of govt. units
Commercial zoning
environmental
local
implementation

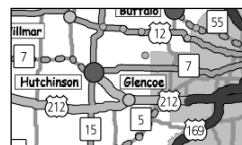


Trunk Highway 7 Access Management Ordinance



1995 Mn/DOT Corridor Study

Recommended Local Regulatory Measures
Never Implemented
Local's Requested Assistance from MnDOT with Implementation

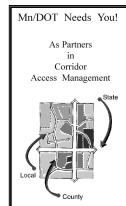


T.H. 7 Ordinance Challenges



Large # nonconforming accesses-Proposed Standards
Conflicting Local Objectives
Rights - Further Land Subdivision
Planning Horizon & "Zoning"
Roadway-existing v. future needs
Encouraging development of Supporting Road Network

Education & Outreach Efforts



Brochure - Local Elected Officials
Seminars & Speaking Engagements
Internal
External
Technical Assistance



Future Activities

Guidance - IRC's
Model Access Management
Ordinance
Legal Strategy
 litigation
 statutory
Research
 safety & mobility
 purchasing access control
Economic Impacts
 before and after studies
Training

MnDOT Land Use & Access Management

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